

Maine Stream Team Program **NEWS**



Networking, Education, and Stewardship

Volume 4 Issue 1 Winter/Spring 2004

Greetings and Happy New Year!

2003—The Year In Review

Hello! This is Jeff here at the Maine Stream Team Program (MSTP), and I'd like to share with you a review of some MSTP highlights from 2003. I'll start with the first annual Maine Stream Summit (MESS '03) which took place at Bowdoin College in Brunswick in March. I felt it was a big success at both providing stream teams, other conservation organizations, student groups, and concerned individuals an opportunity to share stories and results of the work that they've been doing in their watersheds. It also provided these youths and adults an opportunity to learn about the activities of others through oral presentations and displays as well as learn about various topics related to streams and rivers through interesting workshops. I am really looking forward to MESS '04 in Belfast on April 7, 2004 (registration form and details are included in this newsletter).

The MSTP also focused a lot of energy and attention on Stream Habitat Walk training in various parts of the state including Card Brook (Ellsworth), Jones Brook (Nobleboro), Mill Brook (Westbrook), Otter Brook (Windham), Sheepscot River (Alna), Tannery Brook (Gorham), Trout Brook (South Portland), Thompson Lake tributaries (Oxford), and Bagaduce River (Penobscot). These stream walks are informative to partici-



pants and a source of preliminary data on the conditions of the stream as well as any pollution or habitat threats that local groups might want to investigate further and correct in the future. I'm also excited to announce that I expect that the MSTP will be working with the Maine Department of Inland Fisheries and Wildlife to further refine and more consistently conduct these trainings so that there will be increased data gathering and sharing by and between our organizations. This is a terribly useful venture because there are over 33,000 miles of streams and rivers in Maine ... (continued on page 2)

INSIDE THIS ISSUE						
MSTP — The Year in Review (2003)	1		Announcements	7		
Critter Corner: Water Pennies	3		Grant Opportunities	8		
Photograph / Illustration Contest	4	5 1	Calendar Items	9		
Maine Stream Summit 2004	5		Contact Us	10		

...continued from page 1

and the conditions of many of these miles remain unknown.

The MSTP has also been involved in some intensive stream/river assessments. Some examples of projects in which the MSTP has provided support to have been studies in the Sunday River watershed (Bethel) and studies of urban streams in the greater Portland and Bangor areas. More projects done in collaboration with other organizations are anticipated in the coming years. Other activities in which the MSTP are involved in include: serving as advisors on watershed councils such as the Presumpscot River Watershed Coalition, Androscoggin River Watershed Coalition, the



salmon river watershed councils; producing newsletters and maintaining a website; providing support and advice to streams and other similar organizations/individuals related to stream studies, assessments, and protection efforts; assisting with streambank re-vegetation efforts on the Saco River; providing assistance during teacher training workshops; and, as time allows, assisting school groups with stream-related projects and studies.

There's a lot of people I'd like to thank. First, I'd really like to thank Mary Ellen Dennis in our Augusta DEP office and Mark Whiting in our Bangor DEP office. When they've been able to find

the time, they've really helped provide advice and support in their neck of the woods and to the MSTP in general. Second, I'd like to thank the Americorps program volunteers who have contributed much of their time and energy to the MSTP over the years – MaryLee Haughwout in 2003, Brie Begiebing in 2002, and Heather Girard in 2001. This coming year we will be sharing an Americorps volunteer, Ben Lubbers, with DEP's Lake and Coast Management staff. All of the efforts above would not have been possible without the contributions made by the folks I just mentioned. There are also a lot of people whom I have not mentioned for the sake of the



length of the review. MOST IMPORTANTLY, I'd like to thank the folks who are members of stream teams or other similar stream/river conservation groups. You all are the folks who are getting the job done as volunteers!! Great job and keep up the good work!!

There's one thing I've learned since the MSTP started in 2000 which I'd like to share with stream teams and other similar organizations and individuals around the state. I've learned, as I think many other already know, is that making a real positive difference in the world, such as protecting streams, is quite difficult to do by oneself. Also, doing things on the local level may sometimes not seem like much, but if one sums up all the individual actions being done by a lot of folks around the state of Maine o ver time, much progress is possible. So I would encourage folks to partner with as many other individuals and organizations across the state that share some of your goals, some of whom may already be working in your watershed. Your chance of success often are much greater when you work as a team. For ideas regarding who might be working on similar issues in your region, check out the Stream Team list on our website, visit the links section of our website, visit Maine Rivers website (www.mainerivers.org), speak with your local soil and water conservation district or conservation commission. Good luck with your efforts in 2004 and maybe we'll see you at the Maine Stream Summit on April 7th!

Volume 4 Issue 1 Page 3

Critter Corner: Water Pennies

Water Pennies are a common aquatic invertebrate that many people may have seen, but did not know what it was or recognized as being a living organism. From the top it looks like a round, flattened disk. These "disks" attach themselves to rocks blending in with the substrate color. They are actually the larval form of a type of aquatic Coleoptera (beetle) comprising the family Psephenidae. If one were to examine it closer, turning it over, one would see a living organism with head, legs, and gills. These stay covered by "dorsal, plate like expansions" (McCafferty 1983) that form that disk shape.

Aquatic beetles, as with all aquatic insects, spend part or all of their life cycle in the aquatic environment. In North America alone there are around 1000 species of aquatic beetles divided into 20 families. Most kinds of aquatic beetles are found in quiet waters of ponds and lakes and slow areas of rivers and streams. Water Pennies are one of the few types found in faster moving areas of streams. They are well adapted to life in fast moving currents holding tightly to rocks. The thin, flat plates covering them "are flexible and collectively assume the shape of whatever surface they are on" (Voshell 2002). Around the circumference of the plates are short, fine hairs that hold it onto the rock surface.

The Coleoptera group of insects go through complete metamorphosis (i.e., the four life stages of egg, larvae, pupae and adult) and produce one generation per year. In most cases, the egg and larval stages of beetles occur in the aquatic environment;

bottom (ventral) view

Photos taken by Fred SaintOurs

they migrate from the water to moist areas under logs, stones, or plants to complete the pupal stage; and the adults may be either aquatic or terrestrial. Adult Water Pennies are terrestrial, typically inhabiting the sides or bottoms of rocks and logs near streams, and as opposed to most aquatic beetles live for only a short period as an adult-long enough to reproduce. Water Penny larvae may be found in streams throughout the year (Merritt and Cummins 1996).

Water Pennies are what are referred to as "scrapers" - this refers to the method that they use for obtaining and processing food sources. They feed on algae, especially diatoms, that they scrape off the rock surface. "They stay under the rocks and at night move up to the top of rocks to feed" (Voshell 2002). From a monitoring perspective, they are considered sensitive to pollution that results in enrichment of the stream due to high levels of sediment or algae.

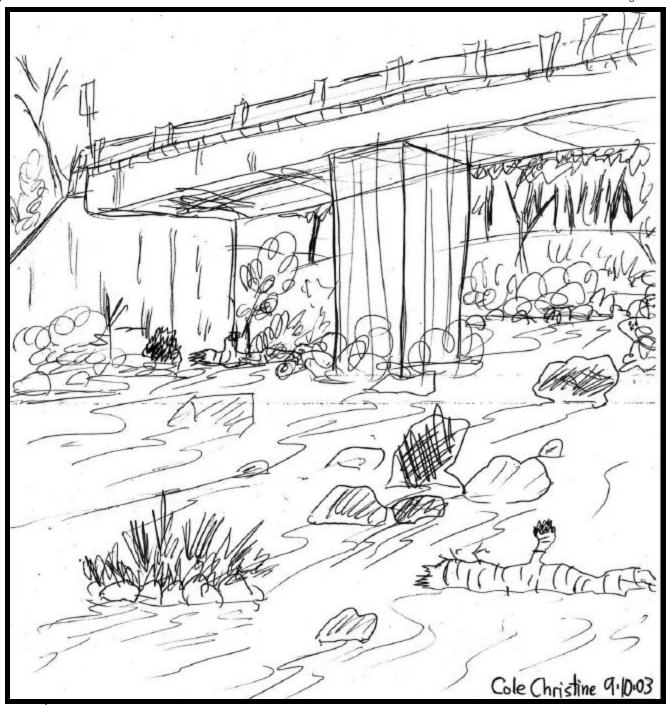
References:

McCafferty, W.P. 1983. Aquatic Entomology <u>The Fisheries and Ecologists' Illustrated Guide to Insects and Their Relatives.</u> Jones and Bartlett Publishers, Boston, MA.

Merritt, R.W. and Cummins, K.W. (Eds.). 1996. <u>An Introduction to the Aquatic Insects of North America.</u> Third Edition. Kendall-Hunt Publishing Company, Dubuque, IA.

SaintOurs, F. 2002. <u>Electronic Field Guide to Aquatic Macroinvertebrates of Streams in Eastern Massachusetts.</u> http://trog.cs.umb.edu/streams/streamsKey/

Voshell, J.R. 2002. <u>A Guide to Common Freshwater Invertebrates of North America</u>. McDonald & Woodward Publishing Company, Blacksburg, Virginia.





The Sheepscot River flowing underneath a bridge in Whitefield Cole Christine

Maine Stream and River Photograph / Illustration Contest

Submit your favorite photograph or illustration of a stream or river scene to the Maine Stream Team Program (MSTP). The selected photograph will be published in the MSTP's tri-annual newsletter (which also gets posted on the MSTP website in full color). Please submit entries in either electronic (e.g., ".jpg", ".bmp"), paper, or print format. Entries will not be returned.

Oral Presentation-15 minute limit:

(Please register early—openings are limited.)

resentation:	
Title of P	

_	~
	r necessar)
:	=
	ner details
	12
, , , , ,	(attach
	_
	ournmary
į.	
(Ð
1	_
•	n

$\overline{}$
\sim
f necessar)
æ
32
ഗ
S
ăí.
Ψ
O
ล้า
~
\subseteq
≔
ഗ
=
<u>~</u>
, ,
$\overline{}$
Ψ
$\overline{}$
$\overline{}$
her detail
d)
$\underline{\Psi}$
\boldsymbol{L}
Ŧ
_
\neg
_
Ψ-
Ξ
ť
ch Ch
ach f
tach f
ttach f
attach f
(attach f
Summary (attach f

	Equipment: We will be in contact with you regarding your specific presentation equipment needs shortly after receiving your registration
	Equipmen garding you

form.

ion, would you still want to bring a poster or exf there are no spaces left for an oral presentahibit?

	_
	U.
	ĹΛ
•	щ

Summit Cost: (see reverse side for mailing information)

Registration includes lunch, snacks and bev-

Early Registration (prior to March 5th):

\$10 for adults, \$5 for students (K-12)

Late Registration (after March 5th) and Walk-

\$15 for adults, \$7.50 for students (K-12)

please contact us soon about possible scholf you need financial assistance for registration or travel to the Maine Stream Summit,

Afternoon Workshops Topics

workshops based upon interest levels. Not choices for workshops. We are offering Please rank your 1st, 2nd, 3rd and 4th all workshops will be offered. Basic Stream Ecology (Part I): Physical and Chemical Processes

Basic Stream Ecology (Part II): Biological Communities and Processes

invertebrates (Basic Ecology and Identification) Aquatic Insects and Other Macro-

Native and Invasive Fish

Basic Monitoring Techniques for Water Quality

Roundtable Discussion: Teacher Projects— What Works and What Doesn't?

Doesn't? How Do We Move Towards Methods Councils, Stream Teams, and Other Conserva tion Organizations — What Works and What Roundtable Discussion: Watershed Standardization? How to Deal with Data— Managing and Presenting Water Quality Data

Working With Online Data Sources

Other:

tment of Environmenta Protection, the University of Maine, the Senator Knox-Lincoln, and Waldo Counties. ganized by the Maine Depart

MainE Stream **Summit 2004**

(The MESS)

Supporting science and stewardship of Maine's streams and rivers



Wednesday, April 7, 2004

8:30 am-3:00 pm

Belfast, Maine (Route 3) **University of Maine Hutchinson Center**

MainE Stream Summit 2003

A one-day gathering of citizen and school groups (of all ages) sharing their monitoring, research, restoration, and other stewardship work on local streams and rivers.

Schedule of Events:

- 8:30 Registration
- 9:00 Keynote speaker
- 9:30 15-minute presentations by citizen, school, & agency groups
- 10:30 Break
- 10:45 Workshop Session 1
- 11:45 Fair & Lunch
- 12:45 15-minute presentations by citizen, school, & agency groups
- 1:45 Break
- 2:00 Workshop Session 2
- 3:00 Adjourn
- Keynote speaker: Andy Goode, Vice President of U. S. Programs for the Atlantic Salmon Federation. Andy will speak about one of the largest river restoration projects in this country currently underway on Maine's Penobscot River.
- Dynamic oral presentations, posters and exhibits: citizen and school groups share their projects conducted on local streams and rivers.
- Topic workshops: Presentations, discussions and hands-on activities focused on stream ecology, monitoring, dealing with data, success stories, "lessons-learned", and ageappropriate activities.
- Stream monitoring "fair" with display tables for equipment, methods, strategies, teaching tools, demonstrations, and other stream monitoring and stewardship resources and ideas.



Purpose of the MainE Stream Summit

- Hear what local groups are learning from the streams they monitor and about their stewardship projects
- Provide opportunities for students to share their work
- Recognize the successes of local monitoring and stewardship groups
- Help groups locate resources, meet people with similar interests, and generate new ideas

Each group is invited to bring up to 3 presenters. (teachers, students, citizens, mix)

MAKE CHECKS PAYABLE TO: BOWDOIN COLLEGE

PLEASE RETURN CHECK & REGISTRATION TO:
Waldo County Soil & Water Conservation District
c/o Kym Sanderson
266 Waterville Rd.
Belfast, ME 04915

Do you need a table or wall for your display?

(please circle one)

-over-

If you have any questions, please contact Jeff Varricchione at 1-888-769-1036 (toll-free in Maine) or e-mail: <mstp@maine. gov>

REGISTRATION FORM

															
Name:	Co-presenters (if applicable):	□No □Yes, oral presention	Are you interested in doing an oral proentation or participating in the poster/	☐ High School	☐ Middle School	☐ Elementary School	Category (check all that apply):	E-mail:	Telephone:	State:	Town:	Mailing Address:	Organization/School/	Name:	Registration Dea
	licable):	ention ☐Yes, poster/exhibit	Are you interested in doing an oral presentation or participating in the poster/	Other	☐ Adult	College	that apply):			Zip:			Organization/School/Stream Team (if applicable):		Registration Deadline: March 16, 2004

Page 7



Announcements



 New Publication: "Where Rivers are Born: The Scientific Imperative for Defending Small Streams and Wetlands"

Learn about why these waterbodies and ecosystems are so valuable at < www.amrivers.org/docs/ WhereRiversAreBorn.pdf >. The publication is free and downloadable.

 Document Available Online: "Riparian Forest Buffers-Function and Design for Protection and Enhancement of Water Resources"

The USDA Forest Service publication prepared by David J. Welsch is now available online at < www. na.fs.fed.us/spfo/pubs/n_resource/buffer/cover.htm >. This is an excellent publication and great reference on function and ecology of buffers and streams. It is very readable with many pictures and graphics.

• Capacity Building Document is now available: "Building Capacity for Nonpoint Source Management"

This document is available from the United States Environmental Protection Agency. It includes case studies from around the country highlighting how watershed groups, local governments, and organizations have engaged in innovative approaches to group building and organization (establishing partnerships, soliciting volunteers), organizing capital resources and fiscal management (obtaining private grants and federal funding), and using technical and specialized resources (using experts, developing innovative projects, and procuring office space and equipment). Website: < www.epa.gov/owow/nps/bldgcapaccasestdfinal.pdf >.

New Publication: "Maine's Endangered and Threatened Wildlife"

A new publication is available from the Maine Department of Inland Fisheries and Wildlife. "This new softcover book is the first and only comprehensive description of all 49 Maine animals on state and federal endangered species list, from Canada lynx to bald eagles to Blanding's turtles and Tomah mayflies." It also includes background information on the Maine Endangered Species Act and what can help. Order from the Maine Dept. IF&W Information Center (207-287-8000) or online < www.mefishwildlife.com >.

Publication and Video on Watershed Organizations

The Pennsylvania Organization for Watersheds and Rivers put together a fact pack and video on setting up a watershed organization. This is a good and readable resource for groups (31 pages with graphics). Although some of the information is specific to Pennsylvania, it has information useful to any groups. See the website at < www.pawatersheds.org/factpack/factpack1.pdf >.

Stream Systems Technology Center (under the USDA Forest Service)

The SSTA, on the web at < www.stream.fs.fed.us >, is a national technical center chartered to improve knowledge of stream systems and watershed hydrology, develop operational tools and technology, provide training and technical support, and identify research needs for the purpose of coordinating development of needed technology to secure favorable conditions of water flows. Examples of items available from the website include:

- A video entitled "Identifying Bankfull Stage in Forested Streams in the Eastern United States";
- A publication entitled "Stream Channel Reference Sites: An Illustrated Guide to Field Technique"
- A free software package entitled "FishXing" (pronounced "Fish Crossing") which is software intended to assist engineers, hydrologists, and fish biologists in the evaluation and design of culverts for fish passage.
- Cool Macroinvertebrate Website: Electronic Field Guide to Common Aquatic Macroinvertebrates of Small Streams in Eastern MA

While this online key is geared towards Eastern Massachusetts, many of these organisms are also found in Maine. The photographs and simple keys on these pages are excellent! Visit: < trog.cs.umb.edu/streams/streamsKey > on the web.



\$\$ Grant Opportunities \$\$



Funder	Region	Deadline(s)	Phone	Web Site (W) / E-mail (E)
Amelia Peabody Charita- ble Fund	New England (preference MA)	Feb. 1, June 1, October 1	(617)-451-6178	
Tom's of Maine, Inc.	National (emphasis on ME)	February 1, November 1	(207) 985-3982	(W) www.tomsofmaine.com/about/ grant_guidelines.asp
Maine Community Foundation	Maine	Various- number of grants avail- able	(207)-667-9735	(W) www.mainecf.org
Maine DEP- Nonpoint Source Grants for NPS pollution control	Maine	March/April	(207)-287-7727 Norm Marcotte	(W) www,maine.gov/dep/blwq/ docgrant/319.htm
Maine DOT-Surface Water Quality Protection Program	Maine	Year round- grants awarded semi- annually	(207)-624-3080 Alex Wong	(W) www.state.me.us/mdot/env/ swqpp_homepage.htm
Maine Outdoor Heritage Fund	Maine	March 1	(207)-688-4191	(W) www.state.me.us/ifw/ outdoorheritage/homepage.htm
Patagonia	National and International (several grants have been awarded to Maine organizations)	April 30 or August 31		(W) www.patagonia.com/enviro/ enviro_grants.shtml
New England Biolabs Foundation	New England, National, & International	Year round- grants awarded tri- annually	(978) 927-2404	(E) cataldo@nebf.org
Jessie B. Cox Charitable Trust	New England	Year round- grants awarded quar- terly	(617) 227-7940 ext. 775	(W) www.hembar.com/selectsrv/ jbcox/cox.html

An excellent and comprehensive resource that environmental organizations interested in grants should be aware of is the "Environmental Grantmaking Foundations" directory. This directory is available in both print and CD-ROM format at www.environmentalgrants.com

RECEIVE NEWSLETTER BY E-MAIL!

We are moving toward sending the newsletter through email. This will help us to save on printing and delivery costs and paper. We will not sell your e-mail address to other entities. If you have email, please send us your address. For those who do not have email, we will continue to send you the newsletter through the mail.





Calendar Items





Do you have calendar items for us? Please contact us by March 31, 2004.

Maine Stream Summit (MESS). April 7, 2004. University of Maine Hutchinson Center, Belfast, Maine. Plan to attend the second annual Maine Stream Summit. This fun and informative event is intended for both students and adults. Presentations will be made by both student groups as well as neighborhood and regional grassroots organizations about the work they are doing. There will also be workshops on topics from stream ecology to data management.

Maine Water Conference. April 21, 2004. Augusta Civic Center. The theme for 2004 is "Environmental Legacies as a Context for Emerging Issues". Session topics will include: "Maine's Salmon Rivers"; "Riverfronts: a Legacy of Pollution, a Trend Toward Renewal"; and other interesting topics. For more information go to < www.umaine.edu/WaterResearch/mwc/index.htm >.

Maine Conservation Expo. April 21, 2004. University of Maine, Farmington campus. The Franklin County Soil & Water Conservation District, in cooperation with MDEP, MDOT, and others will be hosting this event which will include seminars, workshops, and vendor displays. Some of the workshops and seminars they hope to offer include: The Use of Bark Mulch For Erosion Control; Designing and Planting Buffers; Forming a Conservation Corps; Forming a Road Association; Getting DEP Permits, Including Stream & Wetland Permits; Securing FEMA and Other Municipal Funding; Proper Use of Pesticides; Lake Assist; Culverts; Stormwater Phase II Law Update; Sustainable Forestry; Compost or Mulch; Mulch Buffers; Paving and Paving Alternatives; Pond Construction; Pond Maintenance; Gravel Roads Maintenance & Front Runner Training; Drainage, Drainage, Drainage by MDOT; Logger (CLP) Re-Certification, and more. For more information or to register (deadline March 25th) contact Rosetta Thompson at FCSWCD at (207) 778-4279 or write to FCSWCD, 107 Park St., Farmington, ME 04938.

Maine Land Conservation Conference. April 30 - May 1, 2004. Camden Hills Regional High School. Sponsored by the Maine Land Trust Network. For more information, visit < www.mltn.org > or call (207) 729-7366.

National River Rally 2004. May 21 - May 25, 2004. Charlottesville, Virginia. Sponsored by River Network. Scholarships are available. For more in-

Welcome New Stream Teams!

55 Salmon Recovery Project Stream Team (Kenduskeag Stream)

Bagaduce Watershed Association (BWA) additions:

#56 Winslow Stream

#57 Mill Brook

#58 Smelt Brook

#59 Bagaduce Stream

#60 Black Stream

The BWA already has 2 Stream Teams:

#48 Camp Stream

#54 Mill Stream

#61 Carlton Stream (Marine Environmental Research Institute)



formation, visit < www.rivernetwork.org >.

YOU ARE INVITED TO SEND US ...

your news or calendar items that you would like us to include in the upcoming newsletter.



Maine Stream Team Program c/o Maine DEP 312 Canco Road Portland, Maine 04103

Return Service Requested

How Do I Join the MSTP?

It's easy! First, choose a stream or stream segment. Next, either obtain a "stream team registration form" by contacting us or filling out the online registration form. After registering, you will receive some helpful information and begin to receive our periodic newsletter to help you stay up-to-date.

Membership to the program is free to any interested citizen, family, or organization. Once you have a "Team" and a stream, you're set! You can determine your stream's values and problems and you can plan projects based on your assessments. You establish the course of events in protecting your stream. The Maine Stream Team Program can help you with ideas, advice, and informational materials.

Contact The Maine Stream Team Program (MSTP):

Mail: Maine Stream Team Program, c/o Maine DEP, 312 Canco Road, Portland, ME 04103

E-mail: mstp@maine.gov Internet: www.state.me.us/dep/blwq



Please note: our e-mail address has changed

<u>Phone</u>: (888)769-1036 (toll free – ask for the Maine Stream Team Program); (207)822-6317 [Jeff Varricchione, Portland, coordinator]; (207) 287-7729 [Mary-Ellen Dennis, Augusta]; (207)941-4566 [Mark Whiting, Bangor]

Deadline for submitting calendar items, articles, or photos for the next newsletter is March 31, 2004.

